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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,377	11/14/2001	Sadato Akahori	Q67294	6696

7590

07/11/2005

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EXAMINER

UPRETI, ASHUTOSH

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/987,377	AKAHORI, SADATO	
	Examiner	Art Unit	
	Ashutosh Upreti	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/28/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's amendment filed February 28, 2005, has been entered and made of record.

In view of applicant's amendment, the objection to Figures 4 and 5A are withdrawn.

In view of applicant's amendment to the claims, the objections to claims 3 and 8 are withdrawn.

Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

The applicant has amended the claims to state that the image data is now plural kinds of image data representing a series of images and that the layout of these images is automatically constructed and they are then displayed on a screen. Most aspects of the amended claims are still rejected using the previously presented references, but the "series of images" and "automatically constructed" limitations require new grounds of rejection, which are given below.

Claim Objections

Claim 4 is objected to because of the following informalities: On the 3rd line of the amended claim 4, "images-to" is incorrect (removing the hyphen will cure this problem). Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 8-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (U.S. Patent 6,687,331) in view of Bae (U.S. Patent Publication 2003/0228041 A1) and Hibbard (U.S. Patent 6,266,453).

As to claim 1, Muller discloses a medical image processing method of processing image data representing an image obtained by radiography (Figure 2a) and read by an image reading apparatus (column 7 line 13 – if an image is displayed to a screen it must be being read), said method comprising the steps of:

receiving plural kinds of image data representing a series of images (column 3, lines 38-40 and Figures 4a-c show images of different orientations taken in a sweep reading) and respective photographing conditions (column 4, lines 1-2);

executing image processing (column 7 lines 5-7, here rotating an image is a form of image processing) of the plural kinds of image data (Figures 4a-4c show several kinds of images obtained);

obtaining output-format control information corresponding to the photographing conditions (column 3 lines 36-39 – here the orientation / inverting state of the image is obtained, which corresponds to the photographing condition) received from a

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predetermined set of output-format control information (Figure 5, column 4 lines 1-2 and the table in column 6) to be used to control an image format when the series of images are to be output (column 3 lines 44-47) in one screen (column 1, line 27) ; and

Muller does not expressly disclose receiving an image and its respective photographing condition when the image is obtained; or

automatically constructing a layout of a series of images to be output in one screen on the basis of the output-format control information obtained.

Bae discloses the mixing of digital information (e.g. table position) with the scan signal (paragraph 0030 lines 15-19). This means that the photographing condition is obtained when the image is obtained. Muller was not cited for this limitation, as it does not indicate when the photographing condition information is obtained.

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to combine information on photographing condition and the image data when the image is obtained, as both pieces of information need to go to the same end user. This would ensure that the image and its associated photographing condition data are kept together and not mixed up with other images and data, thus providing motivation.

Hibbard discloses automatically constructing a layout of a series of images to be output in one screen (Figure 1) on the basis of the output-format control information obtained (column 6, lines 47-49 and column 7, lines 5-6).

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to automatically construct a layout of images on a screen, as in Hibbard, when displaying the images of Muller, as they both involve obtaining and displaying a medical images to a user. Doing so would enable a user to get a better view of a body part by showing them several viewpoints side-by-side, thus providing motivation.

As to claim 2, it is inherent that each photographing condition is determined in accordance with a portion to be photographed, as you can't photograph something without the conditions being in accordance with the object. Of additional relevance, Muller discloses that each of the photographing conditions (positions) is determined in accordance with a portion (organ) to be photographed.

As to claim 3, Bae as applied above, further discloses storing the obtained output-format control information as image attendant information of the image data (paragraph 0030 lines 15-19). Here the position information is treated in a similar way as other attendant information (like patient name) (paragraph 0030 line 12) and is mixed with the scan signal (paragraph 0030 line 16).

Hibbard as applied above further discloses outputting a series of images in the layout constructed on the basis of the stored output-format control information, in accordance with a user's instruction (column 6, lines 56-59).

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As to claim 4, Hibbard as applied above further discloses previewing and adjusting the series of images to be output in one screen (Figure 1, here elements 126 and 128 are used to adjust the series of images that are previewed on the screen).

Regarding claim 5, the limitations of the claim are rejected as the same reasons set forth in claim 1 (relating to inverting state of the image).

Regarding claim 6, the limitations of the claim are rejected as the same reasons set forth in claim 1.

Regarding claim 8, the limitations of the claim are rejected as the same reasons set forth in claim 3.

Regarding claim 9, the limitations of the claim are rejected as the same reasons set forth in claims 1 and 3 (claim 1 discusses the 1st, 2nd and 3rd means, claim 3 discusses the 4th means). Furthermore, outputting image attendant information and the image data are disclosed in Bae (paragraph 0030 lines 8-11). Here the attendant information (e.g. patient name) is within the header section of the image data file.

Regarding claims 10 and 11, the limitations of the claim are rejected as the same reasons set forth in claim 2.

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Regarding claims 12 and 13, the limitations of the claim are rejected as the same reasons set forth in claim 4.

Regarding claims 14 and 15, the limitations of the claim are rejected as the same reasons set forth in claim 5.

As to claim 16, the limitations of the claim are rejected for the same reasons set forth in claim 1.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashutosh Upreti whose telephone number is (571) 272-7428. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (571) 272-7414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AU

AU
June 29, 2005


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SUPERVISORY PATENT EXAMINER
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